



(11)

**EP 0 738 509 B1**

(41)

(12) **EUROPEAN PATENT SPECIFICATION**

(45) Date of publication and mention  
of the grant of the patent:  
**03.09.2003 Bulletin 2003/36**

(51) Int Cl.7: **A61K 7/48, A61K 7/50**

(21) Application number: **96201019.5**

(22) Date of filing: **16.04.1996**

(54) **Aqueous cleaning and conditioning composition**

Wässrige Reinigungs- und Pflegezusammensetzung

Composition aqueuse de nettoyage et de conditionnement

(84) Designated Contracting States:  
**AT BE CH DE ES FR GB GR IT LI NL PT**

(72) Inventor: **Zocchi, Germaine**  
**4161 Villers-Aux-Tours (BE)**

(30) Priority: **17.04.1995 US 422471**

(74) Representative:  
**Smulders, Theodorus A.H.J., Ir. et al**  
**Vereenigde**  
**Postbus 87930**  
**2508 DH Den Haag (NL)**

(43) Date of publication of application:  
**23.10.1996 Bulletin 1996/43**

(73) Proprietor: **Colgate-Palmolive Company**  
**New York, N.Y. 10022-7499 (US)**

(56) References cited:  
**WO-A-96/02225** **GB-A-1 390 503**

Note: Within nine months from the publication of the mention of the grant of the European patent, any person may give notice to the European Patent Office of opposition to the European patent granted. Notice of opposition shall be filed in a written reasoned statement. It shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

**EP 0 738 509 B1**

**EP 0 738 509 B1****Description****BACKGROUND OF THE INVENTION**

5 [0001] There exists a continuing need for preparing cleansing products which perform the proper cleansing, are mild to the skin, condition the skin and are aesthetically pleasing as well. Recently, there have been a number of "2 in 1" products which have attempted to provide these functions in one product. However, these products have a number of disadvantages. For example, the products are marketed as a heavy emulsion which has a tendency to separate in time and is not aesthetically pleasing. Additionally, such systems may have beads which are not stable at long term  
10 thereby liberating their contents or are systems wherein the emollient carrying materials are not stably suspended over time and/or the aqueous phase becomes turbid and change color over time. The delivery system of the conditioning agent is not optimized for the efficient deposition of the sensory conditioning agent(s) as well.

[0002] A new composition has been discovered which provides a clear, stable single aqueous cleansing phase having stably dispersed and suspended therein particles bearing the conditioning agents. When rubbed on the skin, the particles release the conditioning agents onto the skin in an efficient, productive manner. The clarity of the aqueous cleaning  
15 phase and the stability of the conditioner carrying phase maintain their respected clarity and stability for at least three months at 43°C.

**Summary of the Invention**

20 [0003] In accordance with the invention, there is a combination cleansing, conditioning composition comprising a stable, clear aqueous cleansing phase having stably dispersed and suspended therein particles bearing the conditioning agents, the said aqueous cleansing phase comprising:

25 a. A high foaming anionic surfactant,

b. An amphoteric surfactant in quantities of at least 0.2 wt.% of the composition wherein clarity of the aqueous phase is maintained,

30 c. An effective amount of a viscoelastic enhancing, suspending material comprised of a xanthan gum having an initial transmittance in a 1 wt.% distilled water solution of at least 85%, as measured by a UV spectrophotometer at 600nm, and

35 d. particles both insoluble and stably suspended in the aqueous phase, bearing an effective amount of an oily, water insoluble or essentially water insoluble skin or hair conditioning agents, the particles being of such a size and material to readily deliver the conditioning agent to the skin or hair when the particle is abraded against the skin or hair during ordinary cleansing activities.

**Detailed Description of the Invention**

40 [0004] Any high foaming anionic surfactant can be employed in the composition. Examples of such surfactants include but are not limited to long chain alkyl (8-20 carbon atom, preferably 10-18) materials such as long chain alkyl sulfates, long chain alkyl sulfonates, long chain alkyl phosphates, long chain alkyl ether sulfates, long chain alkyl alpha olefin sulfonates, long chain alkyl taurates, long chain alkyl isethionates (SCI), long chain alkyl glyceryl ether sulfonates  
45 (AGES) and sulfosuccinates. Those anionic surfactants can be alkoxylated, preferably ethoxylated, or not. The preferred anionic surfactants are the high foaming sulfates and sulfonates, particularly those which are ethoxylated such as sodium laureth (2 ethoxy) sulfate. All these materials are highly water soluble as the sodium, potassium, alkyl and ammonium or alkanol ammonium containing salt form and provide high foaming cleansing power. Since mildness is a clearly a desirable attribute, it is preferred to have little or no anionic surfactant which has a high irritation potential.  
50 For example, fatty acid carboxylate soaps are present in limited quantity or not present at all. When using surfactants such as sulfates or sulfonates, preferably ethoxylated, the composition generally has less than about 3wt%, more preferably no presence of an additional anionic surfactant.

[0005] The quantity of the anionic surfactant is not unduly significant; however, minimum quantities of at least 2 wt. % of the composition should be employed. Very little benefit above 25 wt. % of the composition is generally gained.  
55 Generally, a range of 5 to 20 wt. %, preferably 7 to 13 wt. % of the composition can be employed.

[0006] The second component of the cleansing phase is an amphoteric surfactant. These surfactants are generally known for their high surfactant activity, lather forming and mildness. Examples of amphoteric surfactants which can be used in the compositions of the present invention are those which can be broadly described as derivatives of aliphatic

## EP 0 738 509 B1

secondary and tertiary amines in which the aliphatic radical can be straight chain or branched and wherein one of the aliphatic substituents contains from 8 to 18 carbon atoms and one contains an anionic water solubilizing group, e.g., carboxy, sulfonate, sulfate, phosphate, or phosphonate. Examples of compounds falling within this definition are sodium 3-dodecylaminopropionate, sodium 3-dodecylaminoisopropane sulfonate, N-alkyltaurines, such as the one prepared by reacting dodecylamine with sodium isethionate according to the teaching of U.S.P. 2,658,072, N-higher alkyl aspartic acids, such as those produced according to the teaching of U.S.P. 2,438,091, and the products sold under the trade name "Miranol" and described in U.S.P. 2,528,378 Other amphotericics such as betaines are also useful in the present composition.

**[0007]** Examples of betaines useful herein include the high alkyl betaines such as coco dimethyl carboxymethyl betaine, lauryl dimethyl carboxymethyl betaine, lauryl dimethyl alpha-carboxyethyl betaine, cetyl dimethyl carboxymethyl betaine, lauryl bis-(2-hydroxyethyl)carboxy methyl betaine, stearyl bix-(2-hydroxypropyl) carboxymethyl betaine, oleyl dimethyl gamma-carboxypropyl betaine, lauryl bix-(2-hydroxypropyl) alpha-carboxyethyl betaine, etc. The sulfobetaines may be represented by coco dimethyl sulfopropyl betaine, stearyl dimethyl sulfopropyl betaine and amido betaines amidosulfobetaines. The betaines are generally preferred with the long chain alkyl group particularly coco, most preferred. Amino groups therein are also preferred. The most preferred betaines are the cocoamido propyl or ethyl betaines.

**[0008]** The quantity of amphoteric agent minimum is not unduly significant but should be at least 0.2 wt. % of the composition, preferably 0.5 wt. %. However, the clarity of the aqueous phase must be maintained. The quantity of amphoteric reagent can affect the clarity. For example, with cocoamidpropylbetaine, a level not exceeding 2 wt% can be employed. Generally there is no more than 10 wt.%, assuming that clarity is maintained, preferably no more than 7 wt.%.

**[0009]** A third component of the composition cleansing phase is not required but is preferred and is a nonionic, mild surfactant. Examples of such surfactants include EO-fatty alcohol, sorbitan and sorbitol esters, glucose ethers and alkylated polyglycosides amine oxides and alkanolamides (CDEA, CMEA). Preferred are alkanolamides and the alkylated polyglycosides (APG). The degrees of polymerization of the APG is preferably in a range of from 1 to 2, more preferably 1.1 to 1.6. The number of carbon atoms in the alkyl, preferably normal, range from 8 to 20 preferably 10 to 18. The alkanolamides have an alkyl group of the same length range as the APG alkyl. The APG can be alkoxyated, preferably ethoxylated, or left without ethoxylation. These materials are readily available from suppliers such as Emery, Henkel and Seppic.

**[0010]** The quantity of nonionic surfactant can vary substantially. Generally a minimum of 0.5 wt% of the composition is employed. Above 10 wt%-generally does not achieve substantial benefits and merely adds cost. A range of 0.75 to 7 wt%, preferably 1 to 4 wt% can be employed.

**[0011]** From the nature of the invention, it is clear that any additional materials which may typically be present in aqueous compositions such as colorants, preservatives, chelating agents, and fragrances can also be present in the composition as long as the clarity and stability of the system, as defined, can be maintained. The same criteria also applies to any additional "actives" such as surfactants with the additional proviso that the mildness of the system be preserved.

**[0012]** The matching of these two, preferably three components of the aqueous phase of the compositions brings about an excellent mix of properties for cleansing, such as high foam, long lasting controlled lather and a desirable mildness. Clarity is a significant characteristic of this phase and the clearness is maintained for lengthy periods of time. For example clarity of the finished composition has been maintained for a period of at least three (3) months at a temperature of 43°C. This clarity is measured by transmittance. It is measured directly on the end product (after removing the particles with a spoon) by measuring on a UV spectrophotometer at 600 nm. Acceptable transmittance is at least 85%, preferably above 90%.

**[0013]** The composition of the invention provides a unique method for delivering conditioning agents to the skin and hair. Within the clear aqueous phase are stably suspended particles which bear on and/or inside their surface conditioning agents. These conditioning agents include but are not limited to emollients, anti-oxidants, vitamins, oils, and any other oil like material applied to the skin or hair for conditioning effect. These particles have a density generally very close to that of water, 1 gm/cm<sup>3</sup>, for ease of suspension and stability. A preferred density range is 0.92 to 1.05 gm/cm<sup>3</sup> more preferred, 0.97 to 1.02 gm/cm<sup>3</sup>.

**[0014]** Their size should be such that they can bear the desired amount of conditioning agent and be readily physically degraded so that the conditioning agent can be delivered to the skin and hair. A further desired attribute of the particle is that it has optimal visual impact to the composition user. Generally the size of the particle can vary from 200 to 2500 µm(micron.) Preferably the particle size is 400 to 2000 µm (micron) and even more preferably 800 to 1800 µm (micron) and most preferably 1000 to 1500 µm (microns). The material comprising the particle should be compatible with water and the skin or hair. Generally such materials can include gelatins, arabic gums, collagens, polypeptides from vegetable or animal origin, alginates, polyamides, glycosamino glycans, mucopolysaccharides, and ethylcellulose Through coacervation, multicoating protein deposition, or reticulation technologies microcapsules can be formed which enclose the

## EP 0 738 509 B1

oil like conditioning agents. The conditioning agents can be applied to the particle surfaces by impregnation.

[0015] When applied to the skin or hair during normal cleansing procedures, these particles are abraded, released and deposit their contents on the skin or hair. Examples of "oily" materials which can be within the microcapsule are vitamins, provitamins, mineral oils, vegetable oils, emollients such as fatty esters and silicones and oil soluble vegetable extracts or animal extracts. These oil bearing particles are available from Hallcrest Liquid Crystal Technology Ltd a UK company having offices in Glenview, Illinois, U.S.A. and from LIPO Chemicals. Other materials which can be employed are oil impregnated particles available as Elespheres® from Laboratoires Serobiologiques, France. Also collagen spheres and glucose amino glycans "GAG" spheres from Coletica (France) called Collaspheres or Thalaspheeres. The preferred particles are the microcapsules from Hallcrest, most preferably the green, silver and iridescent colors. The particles plus the conditioning agents borne thereon are generally from 0.02 to 1.2wt% of the composition, preferably 0.05 to 0.75 wt%. An effective amount of conditioning agent should be carried by the particles. Generally, at least 40% of the loaded particle is conditioning agent, preferably at least 60 wt.% of the particles. One of the loaded particles from Coletica of France is 98 wt.% conditioning agent.

[0016] The last essential component of the composition and the one which provides the stable suspension of particles is the xantham gum. These materials are, in general, hydrophilic colloids made up of a polymer backbone of  $\beta$ -1, 4-linked D-glucose residues. A trisaccharide branch contains one glucuronic acid unit between two mannose units and is linked to every other glucose unit at the number 3 position. The xantham gum has a light transmission of at least 85% when measured as a 1 wt. % solution in distilled water using a UV spectrophotometer such as a Pye Unicam at 600 nm. Distilled water is used as a 100% transmission standard. Preferred transmission is at least 90%. Xantham gums with lower transparency, that is 70% transmission, did not provide compositions which maintained clarity over time. This characteristic preferably coupled with the xantham gum particle size, appear to be significant to the preparation of a clear and stable composition. The particle sizes of the preferred xantham gums are such that 100% goes through 60 mesh (250  $\mu$ m (micron)) and at least 95% through 80 mesh (180  $\mu$ m (micron)) and preferably at least 99% through 177  $\mu$ m (micron) and more preferably at least 92% through 200 mesh (80  $\mu$ m (micron)). Other xantham gums were evaluated and were able to provide a stable suspension of the oil bearing particles but brought cloudiness to the aqueous phase. Other materials were tried but failed for various reasons. For example, carrageenan gum brought about a lack of clarity in the aqueous phase. Various Carbomers containing crosslinked acrylic acid homopolymers brought about a lack of clarity and did not provide an elastic structure build-up. Various organo clays had similar problems as the Carbomers. Carboxy methyl cellulose had no elastic behavior in the system. Without the proper elastic behavior the particles are not stably suspended.

[0017] The successful suspending system should also provide the desired viscosity. The composition is to be liquid, pourable and in non gellular or gellular form. It can be delivered from a hand pumpable container or poured. Generally the desired viscosity is from 1000 to 8000 mPa. s (centipoises) as measured on a Brookfield RVTD viscometer spindle 5 at 10 rpm and 25°C, preferably 1200 to 4500 mPa.s (centipoises.) Suitable xantham gums are available from Kelco located in Brussels, Belgium and marketed as Keltrol T or Keltrol TF, preferably Keltrol T. The xantham gum should be present in from 0.3 to 1 wt% of the composition, preferably 0.5 to 0.95%, more preferably 0.6 to 0.95 wt.% most preferably 0.7 to 0.85 wt%. If xantham gum above 1 wt.% of the composition is employed, the composition can become cloudy and/or have unacceptable skin feel such as stickiness or sliminess.

[0018] The compositions of the invention are prepared by standard techniques taking into account the specific requirements of the composition. The xantham gum employed is wet into a solubilized fragrance, assuming a fragrance is to be used. When a fragrance is employed, it is preferred to use a perfume solubilizer of PEG-9 tridecylether and PEG-40 hydrogenated castor oil. This combination is then added to the water of the composition using a high shear homogenizer, thereby providing clarity and viscoelasticity to the composition. The various surfactants are then added followed by the conditioning bearing particles. The proper viscosity and suspension is achieved. The preferred pH is slightly acidic and more preferably ranges from 5.2 to 5.8 so as to assist in maintaining proper compatibility with the skin. After optional material(s) are added, the balance of the composition is water.

[0019] Aging studies were conducted so as to measure both the clarity (clearness) of the aqueous phase and the stability of the suspended particles. In order to be considered clear, the composition should show at least 85% transmittance as measured on the product as it is after removal of particles, at 600 nm by a UV spectrophotometer. The transmission standard is the water used in the composition. A stable suspension was determined to be no visual settling together of particle at the bottom of the container, no visual rising of the particles to the top, no significant alteration of the particle positions in the container and no observed physical change of the particles such as in shape or color which would indicate an interaction with their environment. The time period was at least three (3) months at 43°C. No modification of foam performance profile of the finished product should be significantly present in that time period. This is an indication that the oily contents of the solid particles are not released.

[0020] Below are examples of the invention demonstrating the uniqueness of the formulation with respect to its components, particularly the viscoelastic suspending agent and the conditioning agent bearing particles. These examples of the invention are intended to exemplify the invention and not be undue limitation(s) thereof.

## EP 0 738 509 B1

Example	Active wt% SLES <sup>a</sup>	CAPB <sup>b</sup>	APG <sup>c</sup>	Xantham Gum <sup>d</sup>	Filled beads
1	8.2	2	1.25	0.8	0.45 <sup>e</sup>
2	8.2	2	0	0.8	0.5 <sup>e</sup>
3	8.2	2	0	0.8	0.75 <sup>f</sup>

a. sodium laureth sulfate, 2EO

b. cocoamidopropyl betaine

c. dodecyl polyglycoside, dp of 1.4.

d. Keltrol T®

e. Hallcrest Type HC626®

f. Lab Serobiol. Elespheres BL 1000®

[0021] Also present in each of the examples was an emulsified fragrance at 2 wt.% and 0.3 wt.% of a preservative. The balance was deionized water. In actual practice either tap or deionized water can be employed, preferably deionized.

[0022] After three months at 43°C, the compositions remained clear, at least 85% transmittance by UV spectrophotometer at 600 nm, after mechanical removal of particles, as measured against water. The particles remained stable as measured visually by no grouping together at the top or bottom as well as change of physical shape. No discoloring of the aqueous phase nor of the particles was observed after three months at 43°C. There appeared to be no effect on lathering at the end of the aging period of three months.

#### Claims

1. A combination cleansing, conditioning composition comprising a stable, clear, aqueous cleansing phase having stably dispersed and suspended therein particles bearing the conditioning agent, the aqueous cleansing phase comprising:

a. a high foaming anionic surfactant,

b. an amphoteric surfactant in quantities of at least 0.2 wt.% of the composition wherein clarity of the aqueous phase is maintained,

c. an effective amount of a viscoelasticity enhancing suspending material comprised of a xantham gum having an initial transmittance in a 1 wt.% distilled water solution of at least 85% as measured by a UV spectrophotometer at 600 nm, and

d. the said particles, insoluble and stably suspended in the aqueous phase, bearing an effective amount of oily water insoluble or essentially water insoluble skin or hair conditioning agents, the particles being such a size and material to readily deliver the conditioning agent to the skin or hair when the particle is abraded against the skin or hair during ordinary cleansing activities.

2. The composition in accordance with claim 1 wherein a is an ethoxylated sulfate or sulfonate.

3. The composition in accordance with claim 1 wherein b is a betaine.

4. The composition in accordance with claim 1 wherein a nonionic surfactant is also present.

5. The composition in accordance with claim 1 wherein the xantham gum has (a) a particle size of such that 100% goes through a 250 µm (micron) mesh screen.

6. The composition in accordance with claim 1 wherein the particles bear the oily conditioning agent within or upon the surface of the particle.

7. The composition in accordance with claim 2 wherein the sulfate or sulfonate is 2 wt.% to 20 wt% of the composition.

8. The composition in accordance with claim 3 wherein the betaine is at least 0.2 but less than 2 wt% of the composition.

**EP 0 738 509 B1**

sition.

9. The composition in accordance with claim 4 wherein the nonionic surfactant is an alkylated polyglycoside and is from 0.5 wt.% to 10 wt% of the composition.
10. The composition in accordance with claim 5 wherein the xantham gum is from 0.6 wt.% to 0.95 wt% of the composition.
11. The composition in accordance with claim 6 wherein the particles have an average diameter size of from 800 to 1800  $\mu\text{m}$  (microns).
12. The composition in accordance with claim 1 wherein oily conditioning agents are selected from the group consisting of vitamins, provitamins, emollients, moisturizers, silicones, vegetable oils and mineral oils.
13. The composition in accordance with claim 8 wherein the betaine is cocoamidopropyl betaine.
14. A method of concomitantly cleansing and conditioning the skin or hair which comprises applying the composition of claim 1 to the skin or hair.

**Patentansprüche**

1. Kombinierte Reinigungs- und Konditionierungszusammensetzung, die eine stabile, klare, wässrige Reinigungsphase mit darin stabil dispergierten und suspendierten, das Konditionierungsmittel tragenden Teilchen umfasst, wobei die wässrige Reinigungsphase
  - a. stark schäumendes anionisches Tensid,
  - b. amphoterer Tensid in Mengen von mindestens 0,2 Gew.-% der Zusammensetzung, wobei die Klarheit der wässrigen Phase aufrechterhalten wird,
  - c. eine wirksame Menge eines die Viskoelastizität erhöhenden Suspendiermaterials, das Xanthangummi mit einer Anfangsdurchlässigkeit in einer 1gew.-%igen Lösung in destilliertem Wasser von mindestens 85 %, gemessen mit einem UV-Spektrophotometer bei 600 nm, umfasst, und
  - d. die Teilchen umfasst, die in der wässrigen Phase unlöslich und stabil suspendiert vorliegen und eine wirksame Menge von öligen, wasserunlöslichen oder im Wesentlichen in Wasser unlöslichen Haut- oder Haar-konditionierungsmitteln tragen, wobei die Teilchen eine solche Größe und aus solchem Material sind, das das Konditionierungsmittel schnell an die Haut oder das Haar abgegeben wird, wenn das Teilchen während der üblichen Reinigungshandhabungen gegen die Haut oder das Haar gerieben wird.
2. Zusammensetzung nach Anspruch 1, bei der a ein ethoxyliertes Sulfat oder Sulfonat ist.
3. Zusammensetzung nach Anspruch 1, bei der b ein Betain ist.
4. Zusammensetzung nach Anspruch 1, bei der außerdem ein nichtionisches Tensid vorhanden ist.
5. Zusammensetzung nach Anspruch 1, bei der das Xanthangummi (a) eine solche Teilchengröße aufweist, dass 100 % durch ein 200  $\mu\text{m}$ -Meshsieb gehen.
6. Zusammensetzung nach Anspruch 1, bei der die Teilchen das ölige Konditionierungsmittel innerhalb oder auf der Oberfläche der Teilchen tragen.
7. Zusammensetzung nach Anspruch 2, bei der das Sulfat oder Sulfonat 2 Gew.-% bis 20 Gew.-% der Zusammensetzung ausmacht.
8. Zusammensetzung nach Anspruch 3, bei der das Betain mindestens 0,2 aber weniger als 2 Gew.-% der Zusammensetzung ausmacht.

**EP 0 738 509 B1**

9. Zusammensetzung nach Anspruch 4, bei der das nichtionische Tensid ein alkyliertes Polyglykosid ist und 0,5 bis 10 Gew.-% der Zusammensetzung ausmacht.
10. Zusammensetzung nach Anspruch 5, bei der das Xanthangummi 0,6 bis 0,95 Gew.-% der Zusammensetzung ausmacht.
11. Zusammensetzung nach Anspruch 6, bei der die Teilchen eine durchschnittliche Durchmessergröße von 800 bis 1800 µm aufweisen.
12. Zusammensetzung nach Anspruch 1, bei der ölige Konditionierungsmittel aus der Gruppe bestehend aus Vitaminen, Provitaminen, Aufweichmitteln, Feuchthaltemitteln, Silikonen, pflanzlichen Ölen und Mineralölen ausgewählt sind.
13. Zusammensetzung nach Anspruch 8, bei der das Betain Kokosamidopropylbetain ist.
14. Verfahren zur gleichzeitigen Reinigung und Konditionierung der Haut oder des Haares, bei dem die Zusammensetzung gemäß Anspruch 1 auf die Haut oder das Haar aufgebracht wird. :

**Revendications**

1. Combinaison de nettoyage, composition de conditionnement comprenant une phase aqueuse de nettoyage, stable, limpide dans laquelle sont dispersées et mises en suspension de manière stable des particules contenant l'agent de conditionnement, la phase aqueuse de nettoyage comprenant :
- a. un tensio-actif anionique hautement moussant,
- b. un tensio-actif amphotère en une quantité d'au moins 0,2% poids de la composition où la limpidité de la phase aqueuse est maintenue,
- c. une quantité efficace d'un matériau de mise en suspension améliorant la viscoélasticité comprenant une gomme xantham possédant une transmittance initiale dans une solution à 1% poids dans l'eau distillée d'au moins 85% telle que mesurée par spectrophotométrie UV à 600 nm, et
- d. lesdites particules, insolubles et mises en suspension de manière stable dans la phase aqueuse, comportant une quantité efficace d'agents de conditionnement pour les cheveux ou pour la peau huileux insolubles dans l'eau ou essentiellement insolubles dans l'eau, les particules étant de taille et de matériau tels qu'elles délivrent aisément l'agent de conditionnement à la peau ou aux cheveux lorsque la particule est abrasée contre la peau ou les cheveux lors d'activités ordinaires de nettoyage.
2. Composition selon la revendication 1 dans laquelle a représente un sulfate ou sulfonate éthoxylé.
3. Composition selon la revendication 1 dans laquelle b représente une bétaine.
4. Composition selon la revendication 1 dans laquelle un tensio-actif non ionique est également présent.
5. Composition selon la revendication 1 dans laquelle la gomme xantham possède (a) une granulométrie telle que 100% passe au travers d'un crible de maille 250 µm (micron).
6. Composition selon la revendication 1 dans laquelle les particules comportent l'agent de conditionnement huileux dans ou sur la surface de la particule.
7. Composition selon la revendication 2 dans laquelle le sulfate ou le sulfonate représente de 2% poids à 20% poids de la composition.
8. Composition selon la revendication 3 dans laquelle la bétaine représente au moins 0,2 mais moins de 2% poids de la composition.

**EP 0 738 509 B1**

9. Composition selon la revendication 4 dans laquelle le tensio-actif non ionique est un polyglycoside alkylé et représente de 0,5% poids à 10% poids de la composition.
- 5 10. Composition selon la revendication 5 dans laquelle la gomme xantham représente 0,6% poids à 0,95% poids de la composition.
11. Composition selon la revendication 6 dans laquelle les particules possèdent une granulométrie moyenne de 800 à 1800  $\mu\text{m}$  (microns).
- 10 12. Composition selon la revendication 1 dans laquelle les agents de conditionnement huileux sont choisis dans le groupe composé de vitamines, provitamines, émoullients, agents hydratants, silicones, huiles végétales et huiles minérales.
- 15 13. Composition selon la revendication 8 dans laquelle la bétaine est la cocoamidopropyl bétaine.
14. Méthode de nettoyage et de conditionnement concomitant de la peau et des cheveux qui comprend l'application de la composition selon la revendication 1 à la peau ou aux cheveux.

20

25

30

35

40

45

50

55